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An

Inaugural Essay

on

Cholera Morbus

for

The Degree of Doctor of Medicine

In the University of Pennsylvania

by Alexander W. Reynolds

of Delaware.

On Cholera Morbus

Cholera Morbus is derived from the greek words χολη bile and ρεω to flow. This disease in its leading and more prominent features, consists in copious discharges of bilious matter, both by vomiting and stool, accompanied with much griping and spasms.

It is chiefly incident to warm weather, but may occur at all seasons and in all climates. It has been considered, as bilious fever turned in, or expending the force of its attack on the bowels, as it is produced by the same causes and cured by nearly the same remedies.

Cholera may often be traced to some irritating or indigestible matter taken into the stomach; but cases, of this

kind seldom occur unless considerable predisposition exists; it may also be caused by cold and by suppressed perspiration, and sometimes it prevails as an epidemic. Cholera Morbus comes on with tenderness of the abdomen, pain, distention, flatulence, followed by violent vomiting and purging. As the case advances the pulse which was weak and fluttering in the commencement becomes still more so, loss of strength now comes on, hurried respiration, damp surface, cold clammy sweats, cold extremmities, great thirst, anxiety, restlessness, and gastric distress. Cramps attend this stage of the disease. The symptoms designating the approach of death, are great prostration of strength, convulsions, hiccups, subsultus tendinum,

low muttering, delirium, and the hippocratic countenance; this sometimes comes on very suddenly.
Cholera Morbus resembles many of the intestinal diseases; such as Colic, Dysentery, &c. It can be distinguished from Colic, by the absence of constipation, from Dysentery by the evacuations per anum being not tinged with blood.
Causes. These are numerous viz. The external application of cold, a morbid impression made upon the stomach by intemperance in eating or drinking, an inordinate use of honey, spoiled meats, and marsh effluvia. Cases have been produced by cheese. Cholera is quite as likely to be brought on by vegetables such as Turnips, Cabbage, and Cucumbers.

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This disease is of gastric origin; the primary imitation being seated in the stomach, is soon extended, from its intimate connection, with the Liver, to that organ; thus deranging its important functions, by which it is stimulated to an increased secretion of bile. As a proof of this it is always noticed that the first discharges are the contents of the stomach and bile is not thrown up until the bilious organs are morbidly impressed and then bile is secreted more rapidly; we now have those profuse bilious discharges which are concomitant with the disease.

Nor do I see any reason for supposing with some, that the bile in Cholera possesses increased acrimony

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in order to account for the phenomena observed in the disease. Is not the great irritation of the stomach and bowels a sufficient cause, why vomiting and purging should be kept up? Do not articles which in health were food, in irritated states of the stomach act as Emetics? It is not therefore surprising, that bile, which is so rapidly secreted and so profusely poured into the alimentary canal, should also excite vomiting and purging, and yet, have not greater acrimony than in health.

We now come to the consideration of the Treatment. Taking our practice from the theory we have just mentioned, it would seem, that our only step is to remove completely

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the primary irritation which is seated in the stomach. Let the ~~the~~ theory be ever so correct it sometimes happens that our practice cannot be deduced from it. We have numerous striking instances of this in medicine, and none more so, than in the case now before us.
In Cholera Morbus there is such a copious secretion of bile, that it has a tendency to keep up the disease, and, until this and the proximate cause be removed the disease will not submit. But we sometimes meet with cases where the treatment may be reversed and the palliative remedies precede evacuations. Every practitioner has seen in the course of his practice cases,

where, by administering Opium at the commencement of the attack, or Calomel combined with Opium, has assuaged irritation and been able to check the vomiting, and purging, and subdue those painful affections, which attend the disease; but as it commonly presents itself it is proper that we should in the first place clear the stomach of its contents and to do this Emetics have been found the most beneficial: but physicians have, too generally, depended upon mild diluent drinks, such as, flax seed tea, warm water, chamomile tea, and many others that answer the same end; This practice only is adapted to mild cases

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of Cholera; Sydenham recommends a Chicken to be boiled in three gallons of water and large draughts and injections to be given alternately, until the whole be vomited or discharged by stool; this either carries off the acrimonious matter or blunts very much its acrimony, after which an opiate completes the cure.

The continuance of vomiting, seems to me, to indicate, that if the irritating matter itself, whatever it may be, which first caused the disease, does not still remain, that the irritation produced by it does, and so long as there, will certainly keep up the disease. Therefore the indication is plain, and for

its removal, I should direct Ipecacuanha, which not only acts by cleansing out the stomach of any offending matter, but interrupts the morbid train of action, by producing a different impression on the stomach, relaxing the surface, and resolving spasm. The second indication is to calm irritation, and remove the spasmodic pains; and to do this we may employ several remedies: of all the remedies we can employ, when spasms are violent, venesection is now considered the most efficient; as in all other cases this remedy must be regulated by the condition of the system; it must not be forgotten that in this disease, we are not to be

altogether governed by the pulse, for let the feebleness of it be what it will if there is only ordinary vigour in the patient the lancet may be employed with safety. For says Professor Chapman I have often used the lancet when the pulse was exceedingly low, and have experienced a striking benefit. As you evacuate you will find the pulse rise, we may therefore lay it down as a pretty general rule, that in the early stage of any disease attended with much pain, if we find the pulse weak, we are to consider it as an indication of the oppressed condition of the system, which, will be most effectually overcome by

the direct evacuant. But allowing this to be true, we are to proceed cautiously with the lancet, either, because the system refuses to react, or the general circulation is so impeded, by the accumulation of blood in the great viscera, or deep seated parts, that copious venesection might produce great prostration of strength and even death. Some Practitioners no doubt have seen cases of this kind. We should therefore make it a general rule in all such cases to draw blood slowly and watch the effects that are produced, and give time for the energies of the body to be restored, and to come fully into action. In doubtful cases of this disease, it would be proper to make

use of frictions and the warm bath both before and after the use of the lancet. In this stage of Cholera Morbus I would always think it necessary, to use the warm bath and frictions; by the general impression that is diffused throughout the system, we seldom ever fail to arouse it from its depressed state, to subdue irritation of the stomach, and to relieve all the spasmodic affections that are coincident to the disease. Embrocations and warm fomentations are also very useful. Warm flannel dry or ring out of hot water or brandy, is highly beneficial, by determining and establishing action on the surface; and a warm decoction of Chamomile flowers or Hops are also

useful. Much has been said of Opium in Cholera Morbus; it may be given before or after the evacuations from the alimentary canal, but at whatever time we may use it, the best method of administering it, on account of the great irritability of the stomach, I think is in the form of an enema, which may be repeated every four or five hours; we often meet with patients much opposed to this manner of giving it; we must then administer an old Opium pill; this is much easier retained than a fresh one; it is given to answer the same end, that is to allay irritation and relieve pain. A bag of Cloves rung out of hot brandy, applied over the epigastric region, is, sometimes, of permanent

utility to the patient. The Saccharum Saturni has been recommended; but above all Calomel in small and repeated doses, is now considered as one of our best remedies to arrest the disease. Acidulous drinks may sometimes be of service; lime water and milk is generally prefered. Too much confidence can not be placed on Acids to check the vomiting though they somtimes accomplish it. That acids are sometimes useful, not only, in allaying temporarily the irritability of the stomach, but of instantly arresting the further progress of the disease, I am confident, as two cases have come to my knowledge, which were entirely cured by drinking lemonade, the stomach previously was so irritable

that even water could not be, for a moment, retained, after it had been drank.
Vesicatories come next to our notice; applied to the epigastrium they are very useful, these may be made either by means of a common blister, or spirits of Turpentine rubbed over the surface or by nitric acid; when the patient complains of much pain you must apply an Alkali to relieve it, and then dress the part with some stimulating ointment.
Mr. Hopes prescription is recommended very highly in such cases.

It is Nitric acid - - - - ℥j
Camphorated Emulsion - - ℥viii
Laudanum - - - gtts XL
Dose ℥j.

Brandy toddy has been recommended.

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The Tourniquet applied to one or more of the extremities. To keep the patient at rest and subdue the vomiting, lying him down fast to the bed has been recommended, and then administer Laudanum.

The greater number of cases of Cholera Morbus can be cured by the remedies I have mentioned when properly employed; but still cases are met with that baffle the efforts of the most skilled practitioner; such cases prevail when the most malignant epidemics are raging, and prove fatal in a very short time; common cases sometimes terminate in twenty four hours. This disease being very liable to relapses, all exciting causes must be avoided, such as excess in eating

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and drinking, using improper articles of food, paroxysms of rage, cold extremities, and fatigue from violent exercise, also beware of miasmatic exhalations, the night air, the hot sun, and constipation; the bowels should be kept open by laxative medicines; as Rhubarb, Magnesia, Castor Oil &c. Bitters should now be employed to give tone to the stomach, and thereby revigorate the system; of these Gentian, Quassia, and Columbo are recommended.

Flannel worn next the skin should not be neglected as a preventative of diseases. I believe there is not a better preventive known for diseases of the alimentary canal than what I have just mentioned. Throughout

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this Essay which I have now brought to a conclusion; my aim has not been to offer any thing new, as to the management of Cholera. To have suggested any thing ~~any thing~~ from experience would be impossible in one so young and inexperienced, only just about to enter the temple of medicine. Speculation would have been idle and presumptuous; therefore, all that I could, and all, I hope that will be expected from one, yet lingering on its threshold, is from a review and careful study of the various means of cure recommended, to point out that course which appears most likely to answer the several indications for the management of the disease. In the hope that all

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its defects will be viewed with an indulgent eye, and, its merits, if any, duly appreciated; this Essay is most respectfully submitted.

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